



SEQUENCE LISTING

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<120> METHODS AND COMPOUNDS FOR MODULATING MELANOCORTIN RECEPTOR LIGAND  
BINDING AND ACTIVITY

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<170> PatentIn version 3.0

<210> 1

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1

Met Leu Thr Ala Ala Val Leu Ser Cys Ala Leu Leu Leu Ala Leu Pro  
1 5 10 15

Ala Thr Arg Gly Ala Gln Met Gly Leu Ala Pro Met Glu Gly Ile Arg  
20 25 30

Arg Pro Asp Gln Ala Leu Leu Pro Glu Leu Pro Gly Leu Gly Leu Arg  
35 40 45

Ala Pro Leu Lys Lys Thr Thr Ala Glu Gln Ala Glu Glu Asp Leu Leu  
50 55 60

Gln Glu Ala Gln Ala Leu Ala Glu Val Leu Asp Leu Gln Asp Arg Glu  
65 70 75 80

Pro Arg Ser Ser Arg Arg Cys Val Arg Leu His Glu Ser Cys Leu Gly  
85 90 95

Gln Gln Val Pro Cys Cys Asp Pro Cys Ala Thr Cys Tyr Cys Arg Phe  
100 105 110

Phe Asn Ala Phe Cys Tyr Cys Arg Lys Leu Gly Thr Ala Met Asn Pro  
115 120 125

Cys Ser Arg Thr  
130

<210> 2

<211> 46

<212> PRT

<213> Homo sapiens

<400> 2

Cys Val Arg Leu His Glu Ser Cys Leu Gly Gln Gln Val Pro Cys Cys  
1 5 10 15

Asp Pro Cys Ala Thr Cys Tyr Cys Arg Phe Phe Asn Ala Phe Cys Tyr  
20 25 30

Cys Arg Lys Leu Gly Thr Ala Met Asn Pro Cys Ser Arg Thr  
35 40 45

<210> 3

<211> 33

<212> PRT

<213> Homo sapiens

<400> 3

Cys	Val	Arg	Leu	His	Glu	Ser	Cys	Leu	Gly	Gln	Gln	Val	Pro	Cys	Cys
1				5					10					15	

Asp	Pro	Ala	Ala	Thr	Cys	Tyr	Cys	Arg	Phe	Phe	Asn	Ala	Phe	Cys	Tyr
			20					25					30		

Cys

<210> 4

<211> 34

<212> PRT

<213> Artificial

<220>

<225> synthetic mini-AGRP

<400> 4

Cys	Val	Arg	Leu	His	Glu	Ser	Cys	Leu	Gly	Gln	Gln	Val	Pro	Cys	Cys
1				5					10					15	

Asp	Pro	Ala	Ala	Thr	Cys	Tyr	Cys	Arg	Phe	Phe	Asn	Ala	Phe	Cys	Tyr
			20					25					30		

Cys Arg

<210> 5

<211> 34

<212> PRT

<213> Artificial

<270>

<273> synthetic AGPP fragment

<280>

<281> MOD\_RES

<282> (1)..(1)

<283> C blocked with acetyl

<370>

<381> MOD\_RES

<382> (34)..(34)

<383> R blocked with amino

<400> 5

Cys	Val	Arg	Leu	His	Glu	Ser	Cys	Leu	Gly	Gln	Gln	Val	Pro	Cys	Cys
1				5					10					15	

Asp	Pro	Ala	Ala	Thr	Cys	Tyr	Cys	Arg	Phe	Phe	Asn	Ala	Phe	Cys	Tyr
			20					25					30		

Cys Arg

<210> 6

<211> 6

<212> PRT

<213> artificial

<320>

<323> AGRP fragment

<400> 6

Val	Arg	Leu	His	Glu	Ser
1				5	

<210> 7

<211> 5

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<400> 7

Leu Gly Gln Gln Val Pro  
1 5

<210> 8

<211> 3

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<400> 8

Arg Phe Phe  
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<210> 9

<211> 34

<212> PRT

<213> Artificial

<220>

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<221> misc\_feature

<223> Xaa is any amino acid

<200>

<201> misc\_feature

<202> (34)..(34)

<203> R is optional

<400> 9

Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Cys
1				5				10						15	

Asp	Pro	Xaa	Ala	Thr	Cys	Tyr	Cys	Xaa	Xaa	Xaa	Asn	Ala	Phe	Cys	Tyr
			20					25					30		

Cys Arg

<210> 10

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 10

Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
1				5	

<210> 11

<211> 6

<212> PRT

<213> Artificial

<210>

<213> AGRP fragment

<210>

<211> misc\_feature

<213> Xaa is any amino acid

<400> 11

Va: Xaa Xaa Xaa Xaa Xaa  
1 5

<210> 12

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 12

Xaa Arg Xaa Xaa Xaa Xaa  
1 5

<210> 13

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<224>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 13

Xaa Xaa Leu Xaa Xaa Xaa  
1 5

<110> 14

<111> 6

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<223> AGRP fragment

<224>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 14

Xaa Xaa Xaa His Xaa Xaa  
1 5

<110> 15

<111> 6

<112> PRT

<113> Artificial



<220>

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 15

Xaa Xaa Xaa Xaa Xaa Ser  
1 5

<210> 16

<211> 6

<212> PRT

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<224>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 16

Val Arg Xaa Xaa Xaa Xaa  
1 5

<210> 17

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

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<211> misc\_feature

<213> Xaa is any amino acid

<400> 17

Val Xaa Leu Xaa Xaa Xaa  
1 5

<210> 18

<211> 6

<212> PRT

<213> Artificial

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<223> AGRP fragment

<220>

<211> misc\_feature

<213> Xaa is any amino acid

<400> 18

Val Xaa Xaa His Xaa Xaa  
1 5

<210> 19

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 19

Val Xaa Xaa Xaa Glu Xaa  
1 5

<210> 20

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 20

Val Xaa Xaa Xaa Xaa Ser  
1 5

<210> 21

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 21

Xaa Arg Leu Xaa Xaa Xaa  
1 5

<210> 22

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 22

Xaa Arg Xaa His Xaa Xaa  
1 5

<210> 23

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 23

Xaa Arg Xaa Xaa Glu Xaa  
1 5

<110> 24

<211> 6

<112> PRT

<213> Artificial

<220>

<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 24

Xaa Arg Xaa Xaa Xaa Ser  
1 5

<210> 25

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 25

Xaa Xaa Leu His Xaa Xaa  
1 5

<210> 25

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

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<223> Xaa is any amino acid

<400> 26

Xaa Xaa Leu Xaa Xaa Xaa  
1 5

<210> 27

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 27

Xaa Xaa Leu Xaa Glu Xaa  
1 5

<210> 28

<211> 6

<212> PRT

<213> Artificial

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<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 28

Xaa Xaa Leu Xaa Xaa Ser  
1 5

<210> 29

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 29

Xaa Xaa Xaa His Glu Xaa  
1 5

<110> 30

<111> 6

<112> PRT

<113> Artificial

<220>

<223> AGRP fragment

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 30

Xaa Xaa Xaa His Xaa Ser  
1 5

<110> 31

<111> 6

<112> PRT

<113> Artificial

<220>

<223> AGRP fragment

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 31

Xaa Xaa Xaa Xaa Glu Ser  
1 5



<210> 32

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 32

Val Arg Leu Xaa Xaa Xaa  
1 5

<210> 33

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 33

Val Xaa Leu His Xaa Xaa  
1 5

<210> 34

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 34

Val Arg Leu His Glu Ser  
1 5

<210> 35

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 35

Xaa Xaa Xaa Xaa Xaa Xaa  
1 5

<210> 36

<211> 6

<212> PPT

<213> Artificial

<220>

<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 36

Leu Gly Gln Gln Val Pro  
1 5

<210> 37

<211> 6

<212> PRT

<213> Artificial

<220>

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 37

Leu Xaa Xaa Xaa Xaa Xaa  
1 5

<210> 38

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<226>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 38

Xaa Gly Xaa Xaa Xaa Xaa  
1 5

<210> 39

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<226>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 39

Xaa Xaa Gln Xaa Xaa Xaa  
1 5

<210> 40

<211> 6

<212> PRT

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<220>

<223> AGRP fragment

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 40

Xaa Xaa Xaa Gln Xaa Xaa  
1 5

<210> 41

<211> 6

<212> PRT

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<223> Xaa is any amino acid

<400> 41

Xaa Xaa Xaa Xaa Val Xaa  
1 5

<210> 42

<211> 6

<212> PRT

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<222>

<223> AGRP fragment

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 42

Xaa Xaa Xaa Xaa Xaa Pro  
1 5

<210> 43

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 43

Leu Gly Xaa Xaa Xaa Xaa  
1 5

<210> 44

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<230>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 44

Leu Xaa Gln Xaa Xaa Xaa  
1 5

<210> 45

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

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<223> Xaa is any amino acid

<400> 45

Leu Xaa Xaa Gln Xaa Xaa  
1 5

<210> 46

<211> 6

<212> PRT

<213> Artificial

<220>

<122> AGRP fragment

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<121> misc\_feature

<123> Xaa is any amino acid

<400> 46

Leu Xaa Xaa Xaa Val Xaa  
1 5

<210> 47

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

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<121> misc\_feature

<123> Xaa is any amino acid

<400> 47

Leu Xaa Xaa Xaa Xaa Pro  
1 5

<210> 48

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment



<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 48

Leu Gly Gln Xaa Xaa Xaa  
1 5

<210> 49

<211> 3

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 49

Arg Xaa Xaa  
1

<210> 50

<211> 3

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 50

Xaa Phe Xaa

1

<210> 51

<211> 3

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 51

Arg Phe Xaa

1

<210> 52

<211> 3

<212> PRT

<213> Artificial

<220>

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<220>

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<123> Xaa is any amino acid

<400> 52

Arg Xaa Phe

1

<410> 53

<111> 3

<112> PRT

<113> Artificial

<120>

<123> AGRP fragment

<120>

<121> misc\_feature

<123> Xaa is any amino acid

<400> 53

Xaa Phe Phe

1

<210> 54

<211> 6

<212> PRT

<213> Artificial

<120>

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<120>

<121> misc\_feature

<123> Xaa is any amino acid

<400> 54

Arg Phe Phe Asn Ala Phe  
1 5